Subject index

Absorption 14/02021, 02231
cooling system 14/02164
Acid gases 14/02015
Acidogenesis/dark-fermentation 14/01940
Activated carbons 14/01943, 01945–01947
Activation energy 14/01890
Adsorbed natural gas 14/01931
Adsorbents 14/01947, 02079
Adsorption 14/01854, 01858, 01902, 01943, 01946, 02141, 02283, 02350
chillers 14/02077
Aeration 14/02290
Agar chemical hydrogel 14/02227
Agriculture
effect of bioelectricity 14/02144
energy generation from waste 14/02156
land use 14/02157
residues 14/02041, 02344
use of photovoltaics 14/02191
waste 14/02350
Air
cavities 14/02080
conditioning, using soil cooling 14/02092
contamination 14/01907
heaters 14/02071
pollution 14/02267
separation process 14/02064
-to-air heat exchangers 14/02349
wash 14/02125
Aircraft
fuel tanks 14/01867
turboprop engines 14/02266
Algae 14/02151
and coal blends 14/02027
biofuels 14/02150
biomass production 14/02348
lipids 14/02249
Alkali metal-based sorbents 14/02278
Alkaline
and acid direct ethanol fuel cell 14/02227
flooding 14/01859
solution, carbon dioxide capture 14/02287
Alkanolamine solvents 14/02090
Alumina foam 14/02095
Aluminium
catalysts 14/01938
industry, power generation 14/02058
reaction with water 14/01935
Amines 14/02279
solvents 14/01901
Ammonia 14/01943, 02231
borane 14/02253
Ammonium perchlorate 14/02039
Anaerobic digestion 14/02346
Anodes, natural convection 14/02256
Anthracite coals 14/02271
gas permeability 14/01857
Anti-freezing 14/02070
Appliances, energy use 14/01995
Apricot stones 14/01947
Aquifers
ground source energy 14/02177
thermal energy storage 14/02076
Arbitrage 14/02275
Aromatic hydrocarbons 14/02295
Arsenic removal 14/01947
Asbestos, industrial treatment 14/02044
Asia, offshore oil wells 14/02281
Atoms, interaction 14/02248
Australia
coal mineral matter 14/01836
photovoltaic electricity systems 14/02200
use of renewable electricity 14/01992
Austria, agricultural use of photovoltaics 14/02191
Baffles 14/02086
Bagasse 14/01983
Bark 14/02158
Batteries 14/01974, 02118, 02138, 02247
electrode coating 14/02119
for electric vehicles 14/02114
lithium-air 14/02258
management systems 14/02180
state of charge 14/02116
switch stations 14/02117
temperature 14/02255
Belgium
Flanders wind farm siting 14/02276
nuclear power plants 14/01963
Benders decomposition 14/02000
Bimetallic catalysts 14/01850
Bioavailability 14/02296
Biochars 14/02350
Biodiesel 14/02107
combustion 14/02030
effect on engine performance 14/02107
emissions 14/02103
from waste cooking oil 14/02143
optimal processing pathway 14/02154
production 14/02147
transesterification 14/01889
Biodiversity 14/02268, 02269
Bioelectricity 14/02251
land use 14/02144
Bioenergy 14/02152, 02159
feedstock from waste 14/02156
Biofuels 14/02249
combustion analysis 14/01887
effect on food prices 14/02160
feedstock production 14/02148
from microbial fermentation 14/01929
from pennycress 14/02297
land use 14/02157
use of natural clay in catalytic combustion 14/02139
Biogas 14/01925, 02346
local plant acceptance 14/02270
upgrading 14/02146
Biogenic gas 14/01892
Biomass
and biodiversity 14/02269
effects on forests 14/02268
effects of particle size 14/02158
gasification 14/02252, 02286
integrated gasification 14/01848
pellets: combustion and emissions 14/02011
spatial supply and demand 14/02142
thermochemical conversion to methanol 14/02161
upgrading processes 14/02149
waste systems 14/02162
wine production residues 14/02041
Bioprocessing 14/02290
Bioreactors 14/02153
Biorefineries 14/02054, 02154, 02155, 02348
denitrifying sulfide removal 14/02353
second generation ethanol 14/02145
Biowaste 14/02357
Bitumen 14/01863, 01891
characterization 14/01856
gasification 14/01871
upgrading 14/01873
Bituminous coal 14/01834
co-gasification 14/01926
Blast furnaces 14/02056, 02057
Boreholes 14/02097, 02176
hydrodynamics 14/02216
thermal energy storage systems 14/02165
Brazil
aluminium industry power generation 14/02058
electricity generation planning 14/01986
energy from agricultural waste 14/02156
oil supply chain 14/01875
power systems 14/02000
use of nuclear energy 14/01968
Bricks 14/02095
Brown coal 14/01924
and algae blends 14/02027
Brushwood, emissions 14/02294
Buildings
attic temperature 14/02080
construction systems 14/02300
cooling 14/02168
double-glazed facades 14/02140
earth–air heat exchangers 14/02163
eco-friendly design 14/02301
energy performance 14/02061, 02122, 02246, 02300, 02305, 02314, 02334
energy use 14/02333, 02339
geothermal energy 14/02164
green roof integration 14/02078
ground source heat pumps 14/02176
heat transfer 14/02349
insulation systems 14/02332
integrated voltaic systems 14/02134
low energy 14/02302, 02341
net zero energy 14/02340
phase change materials 14/02072
photovoltaic potential 14/02203
refurbishment 14/02315
retrofit 14/02309, 02328
roofs and photovoltaic system efficiency 14/02204
self-cleaning materials 14/02025
smart house 14/02222
solar collector integration 14/02121
thermal energy storage 14/02067, 02087
thermal insulation 14/02135
thermal performance 14/02317
thermoelectric cooling and heating systems 14/02201
Burners 14/02013, 02026, 02286
Buses, energy consumption 14/02331
Butanol, use in engines 14/02106
Calcium 14/01850
carbide 14/01895
titanate 14/02230
zirconate 14/02130
Calcium oxide 14/02126
sorbent 14/02133
sorption-enhanced gasification 14/01939
use in carbon dioxide capture 14/02289
Canada
Alberta bitumen reserves 14/01871
British Columbia's energy policy 14/01997, 02221
farming threshold herd size 14/02162
nuclear waste management 14/01956
oil sands 14/01873
Capacitor sensor 14/01895

Carbon capture 14/02024
and offshore storage 14/02281
and storage 14/01885, 02303
power plant integration 14/01845
utilization and storage 14/02292
fibre 14/01867
nanofibres 14/01923
nanotubes 14/01852, 02128, 02239, 02342
sustainability 14/02262
Carbon dioxide
adsorption 14/02283
amine-based absorption 14/02090
and methane separation 14/02146
Building Rehabilitation Programme 14/02315
capture 14/01901, 01939, 01978, 02009, 02033, 02133, 02278, 02279, 02287, 02289, 02316
capture and storage 14/01922, 02281
chemisorption 14/02126
emissions 14/02047, 02274, 02280, 02307, 02335
geological storage 14/02263
plant emission costs 14/01885
post-combustion capture 14/02056, 02057
quality 14/02014
reservoirs 14/01897
social cost 14/01873
storage 14/02282
taxing 14/02304
transcritical cycles 14/02099
transport 14/01899
Carbon monoxide, emissions 14/02013, 02026, 02101, 02111
Carbonate looping 14/02289
Carbonation 14/02126
Cargo containment systems 14/01933
Catalysis 14/02243
Catalysts 14/01850–01852, 01890, 01923, 01924, 02124
cocoa pod husks 14/02107
monolithic 14/01928
steam reforming 14/01938
Catalytic
combustion 14/02139
partial oxidation 14/02050
Cathode materials 14/02113, 02118
Caustic wash 14/01903
Cavitation 14/01933
Cement composites 14/02128
Cement industry
carbon capture and storage 14/02303
energy use 14/02059
use of waste fuels 14/02049
waste heat recovery 14/02046
Cenospheres 14/01948
Ceramics
electrolytes 14/02138
filler materials 14/02044
membranes 14/02124, 02125
resonators 14/02137
solar collectors 14/02121
Cereal straw, use for biofuels 14/02159
Ceria 14/01936
Char 14/01854, 02007, 02293
combustion 14/01849
gasification 14/01850
Charging stations 14/02110
Chemical
absorption 14/01901, 02287
looping combustion 14/01922, 01927, 01944, 02018, 02024, 02031
vapour deposition 14/01852
Chillers 14/01943, 02077
China
biogenic gas 14/01892
carbon capture, utilization and storage 14/02292
carbon sustainability 14/02262
coal composition 14/01835
coal-fired power plants 14/01846
energy and fossil fuel stocks 14/02320
energy conservation and emissions reduction 14/02327
energy saving potential of telecom operators 14/02337
gasoline demand 14/01882
industrial energy use 14/02047
non-ferrous metals industry 14/02336
office building energy use assessment 14/02310
oil shale 14/01860
power system efficiency 14/01921
rural emissions 14/02294
shale gas 14/01916
sulfur dioxide reduction 14/02291
use of electric vehicles 14/02299
waste-to-energy incineration 14/02355
Circulating fluidized beds 14/02010
Claus process
oxygen enrichment 14/02015
thermal furnace 14/02020
Clay, use as combustion catalyst 14/02139
Clean development mechanism 14/01883
Climate 14/02134, 02292, 02323
cooling systems 14/02329
effect on photovoltaic systems 14/02189
Clinker 14/02049
Coagulation 14/02125
Coal
and algae blends 14/02027
blends 14/01839, 01853
char combustion 14/01849
chemical-looping combustion 14/02024
classification 14/01837
cocombustion with sludge 14/02004
cofiring 14/01840
cogasification 14/01926
combustion 14/02010
composition 14/01835
dewatering 14/01878
fire emissions 14/02035
-fired power plants 14/01845, 01846, 01901
flue gas 14/02279
fly ash 14/01944
gas desulfurization 14/01841
gas permeability 14/01833, 01857
gasification 14/01912
integrated polygeneration 14/01848
low-rank combustion 14/01834
mineral matter 14/01836
mining residues 14/02271
power plant combustion products 14/02023
resources and reserves 14/01844
sampling 14/01838
seams 14/01843, 01847, 01900
steam gasification 14/01927
to liquid plants 14/01885
Victorian brown coal 14/01924
Coalbed methane 14/01833, 01843, 01878, 01893, 01894, 01904
Coatings 14/02181
anticorrosive 14/01874
thermal insulation 14/02080
Cocoa pod husks, as catalysts 14/02107
Cocombustion 14/02004
Codigestion 14/02346
Cofiring 14/01840, 02142
Cogasification 14/01926
Cogeneration 14/01971, 01983, 02048, 02229
Cokes 14/01945
structure 14/01853
tumbling strength 14/01851
Cold storage 14/01855
Combined
cycle gas turbines 14/02001
heat and power plants 14/01979, 01991, 02149, 02223, 02252
Combustion 14/02024
-assisted gravity drainage 14/02233
duration 14/02105
efficiency 14/01834, 02127
emissions 14/02011
natural gas 14/02026
oxygen-enriched 14/02284
stability 14/02233
Combustors 14/02018, 02101
Commodity
markets 14/02326
price risk 14/02048
Communication networks, energy saving potential 14/02337
Community energy 14/02261
Compost 14/02296
Compressors 14/01951
Computing techniques 14/02199
Concentrating solar power plants 14/01988, 02187
Concrete 14/02136
Condensation 14/02002, 02006, 02228
Consumers 14/02264
energy-use feedback 14/02339
Contaminants 14/01858
Convection 14/02031, 02225
ventilation 14/02140
Cooking stoves, emissions 14/02294
Cool roofs 14/02080
Coolants 14/01855
Cooling 14/02067, 02098, 02164, 02177, 02329, 02356
load savings 14/02140
systems 14/02063, 02076, 02168
use of phase change in soil 14/02092
Copper 14/02024
and chlorine cycle 14/01941
and zinc oxide microballs 14/01890
Copyrolysis 14/02293
Corrosion 14/01874, 02131
Crude oil
distillation system 14/01868
from oil sands 14/01873
rheology 14/01859
scheduling 14/01881
transport 14/02281
Cryogenics 14/02074
air separation process 14/02064
temperatures 14/02137
Cuba, power station decentralization 14/02267
Current 14/02251
and voltage characterization 14/01977
distribution 14/02250
Cyclic hydrocarbon 14/02295
Cyclodextrin extraction 14/02296
Cylinder charge 14/02288
Data
centres, cooling 14/02329
mining 14/02333
Daylight 14/02135
illuminance 14/02122
Decentralization, of power stations 14/02267
Dehumidification 14/02079
Dehydration units 14/01905

Denitrifying sulfide removal 14/02353
Denmark
energy security 14/02313
use of land for biofuel 14/02157
Deposition 14/02192
Desiccants, performance indicators 14/02079
Desorption 14/02090
Desulfurization 14/01841, 01903, 01946
Developing countries, use of biofuels 14/02150
Diesel
and bioethanol blended fuels 14/02111
combustion 14/02030
renewable 14/02297
soot emissions 14/02025
Diesel engines
alternative fuel emissions 14/02103
exhaust heat recovery 14/02359
injection strategy 14/02109
nitrogen oxide emissions 14/02288
oxygen-enriched combustion 14/02284
Diffusion 14/01858, 02028, 02225, 02231
Dilution refrigeration 14/02098
Dimethyl ether 14/01924, 02043
Diode clamped multilevel inverters 14/02194
Direct methanol fuel cell 14/02256
Disaster reconstruction 14/01966
Distillation 14/01888, 01889, 02073
processes 14/01886
systems 14/01868
Distributed
energy systems 14/02053
generation 14/01970, 01973, 02193, 02222
scheduling 14/02060
system operators 14/01989
District heating 14/01991, 02053
heat loads 14/01976
Domestic distributed generation 14/02222
Double glazed facades 14/02140
Drilling fluids 14/01865
Dry bulk carrier 14/02335
Dryers 14/02260
controllability 14/02079
energy efficiency 14/02079
Dual fuelled engines 14/02109
Dust 14/02196
Dye
removal 14/01854
-sensitized solar cells 14/02198
Earth-to-air heat exchangers 14/02163
Ecofeedback 14/02339
Ecoindustrial parks, process design 14/02298
Economic growth 14/01877, 02311
Ecosystems 14/02265
Eddy current loss 14/01977
Educational institutes, energy waste patterns 14/02333
Elastoviscoplasticity 14/01950
Electric
buses, energy consumption 14/02331
distribution network planning 14/02110
Electric vehicles 14/02110, 02116, 02180, 02255, 02319
batteries 14/02114
battery switch stations 14/02117
charging 14/02215
effect on electricity generation 14/01994
electricity supply 14/01991
hybrid 14/02112
life-cycle analysis 14/02299
Electricity
cogeneration 14/02048, 02161
cogeneration using sugarcane 14/01983
consumption 14/02122
costs 14/02001
costs of renewable sources 14/01992
demand 14/02108, 02221
demand forecasting 14/01989
distribution 14/01973, 01974
grid integration with wind power 14/02207
grid photovoltaic systems 14/02184
grid transmission lines 14/01982
household use 14/01985, 01995
industrial consumption 14/02046
intensity 14/02336
long-term storage 14/02217
markets 14/01911
networks 14/01970, 01975
policies on renewable energy 14/01987
power generation 14/02058
prices 14/01990
production efficiency 14/02252
production, micro-CHP plants 14/02223
renewable energy integration 14/01998
sector, emission reduction 14/02272
storage 14/01999, 02099
supply 14/01991
systems, distributed generation 14/02222
time-varying pricing 14/01997
transmission towers 14/01984
using microbial fuel cells 14/02251
wind power grid integration 14/02205
Electricity generation 14/01965
effect of electric vehicles 14/01994
energy storage 14/02275
expansion planning 14/01986
from photovoltaics 14/01969
from sugarcane 14/02145
integrated gasification 14/01848
integrating renewable energy 14/02197
thermoelectric topping 14/02008
use of municipal solid waste 14/02016
use of natural gas 14/01921
use of renewable energy 14/02318
using wind energy 14/02209
Electricity markets 14/02117
ancillary services 14/01993
concentrating solar power plants 14/01988
large-scale photovoltaic plants 14/02178
Electrocatalysis 14/02224
Electrochemical capacitance 14/01981
Electrode
arrays 14/02250
materials 14/02247
Electrodeposition 14/01936
Electrodes 14/01936, 01972, 02119, 02198, 02227
Electroflocculation 14/02151
Electrolytes 14/02129, 02138, 02258, 02357
additives 14/02120
Electrorefining process 14/01952
Embodied energy 14/02340
Emergency evacuation 14/01961
Emerging economies, urbanization and carbon dioxide emissions 14/02274
Emissions 14/01883, 02035, 02284, 02291
factor 14/01915
taxes 14/02264
Emulsification 14/01855, 02245
Energy
audits 14/02059, 02314
companies, share prices 14/01967
conservation 14/02338
consumption 14/01914, 02311, 02319, 02328, 02162
conversion 14/02298
crops 14/02152
demand 14/01879, 01918, 01985, 02307, 02321
efficiency programmes 14/02315
input–output analysis 14/02280
integration 14/02161
intensity 14/02274
interdependence 14/02325
investments 14/02218
labels 14/01909
legislation 14/02184
management 14/02312
management systems 14/01995
markets 14/01911, 01993, 02058, 02205
patents 14/02323
penalties 14/02279, 02316
performance 14/02246, 02317
planning 14/01968, 02156
policies 14/01960, 02305, 02306
prices 14/01869, 01883, 02160, 02327
retrofitting 14/02332
security 14/02304, 02313, 02324
stocks 14/02320
strategies 14/02219
use assessment 14/02310
use feedback 14/02339
users' behaviour 14/02262
waste patterns 14/02333
Energy storage 14/01973, 01974, 02072, 02099, 02165, 02187, 02247
and costs 14/01999
devices 14/01981
effect on social welfare 14/02275
modelling 14/02240
systems 14/02045
Energy systems 14/02308
and landscape 14/02265
design 14/02213
hybrid renewable energy 14/02222
Energyscape 14/02265
Engines
combustion 14/01887, 02104, 02288
early injection combustion strategy 14/02111
effect of biodiesel on performance 14/02107
exhaust heat recovery 14/02359
gas 14/02085
gasoline/diesel dual-fuel combustion 14/02109
piston dynamics 14/02105
thermal efficiency 14/02284
use of butanol 14/02106
waste heat recovery 14/02347
Environment
and buildings 14/02300
effects of energy consumption 14/02328
industrial emissions 14/02303
Environmental
impact assessment 14/02317
Kuznets curve 14/02234
protection 14/01916
sustainability 14/02302
taxes 14/02307
Esterification 14/01886
Ethane, fuel blends 14/02102

Ethanol 14/01929, 02155
extraction 14/01888
fermentation 14/02153
from sugarcane 14/02145
European Union
building energy efficiency 14/02305
building energy performance 14/02061
carbon capture and storage 14/02303
demand for natural gas 14/01918
directives on building energy efficiency 14/02334
emissions regulation 14/02103
energy crops 14/02152
energy relations with Russia 14/02325
energy standards 14/02317
energy targets and biodiversity 14/02269
nuclear waste management 14/01964
Eutectics 14/02093
Evaporation 14/01874
air-conditioning systems 14/02052
coolers 14/02052
Event study 14/01967
Exhaust gases 14/02111, 02347
heat recovery 14/02359
recirculation 14/02284
Extractive distillation 14/01888
Facades 14/02140
Farms
business survey 14/02159
production efficiency 14/02330
threshold herd size 14/02162
Fast breeder reactors 14/01957
Fast pyrolysis 14/02149
Fatty
acids 14/02072
alcohol production 14/02147
Fault diagnosis 14/02064
Feed-in tariffs 14/01996, 02200
Fermentation 14/01929, 02153
Fibre reinforced polymers 14/01984
Filler materials 14/02044
Film cooling 14/02051
Finland, iron and steel industry carbon capture 14/02056, 02057
Fires 14/02038
emissions 14/02035
heat transfer 14/02038
propagation 14/02036
Fischer–Tropsch liquids 14/01848, 01861
Fission gas bubbles 14/01954
Flameless oxidation 14/02013
Flames 14/02028, 02037
premixed 14/02022
radiation 14/02036
speed 14/02034
temperature 14/02030
Flash power plants 14/02164
Floor cooling systems 14/02168
Flow
boiling 14/01932
pattern maps 14/01864
Flue gases 14/02009, 02010, 02021, 02033, 02233, 02278, 02279
recirculation 14/02026
Fluid
-filled tanks 14/01867
flow distance 14/02086
recycling 14/02068
Fluidized beds 14/02050, 02283
feedstock composition 14/01926
pressurized gasification 14/01939
Fluoroethylene carbonate 14/02120
Fly ash 14/01942, 02023
cenospheres 14/01948
oxygen carriers 14/01944
Foamy oil 14/01862
Food
industry, use of trigeneration systems 14/02045
price and effect of biofuels 14/02160
Forestry
effect of bioelectricity 14/02144
effect on photovoltaic systems 14/02193
management 14/02268
waste 14/02350
Fossil fuel stocks 14/02320
France
car battery switch stations 14/02117
transmission lines 14/01982
Fresnel collectors 14/02081
Frost point 14/01895
Fuel 14/02004
blends 14/02102, 02111
cells 14/01930, 01974, 01979, 02161, 02227, 02229, 02250, 02260
cladding, corrosion 14/02131
combustion 14/02018
consumption 14/02085, 02331, 02359
costs 14/02219
electrolyte-fed fuel cells 14/02227
flexibility 14/02101
from algae biomass 14/02150
nitrogen oxide formation 14/02286
pins, welding 14/01957
prices 14/02155
tanks 14/01867
Fukushima accident 14/01959, 01962, 02358
effect on energy shares 14/01967
Furnaces 14/01834, 02011, 02029
off-gas 14/02127
Fusion
devices, pulsed heat load 14/01951
magnets 14/01958
Gadolinium 14/01953
Gas
absorption 14/02231
coning 14/01869
consumption 14/01909, 01914
cooling 14/02063
decarbonization 14/01920
dehydration processing 14/01905
detection 14/01917
diffusion layers 14/02254
engines 14/02085
extraction rate 14/01900
flaring 14/01907
flow 14/01878
formation damage 14/01870
induction intensification 14/02237
markets 14/01908
meters 14/01910
networks 14/01937
non-condensable 14/02002
pipelines, project financing 14/01913
processing plants 14/01907
reservoirs 14/01876, 01894
separation 14/02033, 02146
storage 14/01897, 01911
streams, hydrogen removal 14/01902
sweetening 14/02228
tanks 14/01931
-to-liquid fuels, emissions 14/02103
transport 14/01899
turbines 14/02001, 02101, 02352
upgrading 14/01898
yields 14/01891
Gasification 14/01849, 01871, 01924, 01925, 01945, 01983
integrated polygeneration 14/01848
pressurized 14/01939
use of pelletized recovered solid waste fuel 14/02343
Gasoline
and diesel dual-fuel combustion 14/02109
demand and price elasticity 14/01882
different formulations 14/02100
engines, use of butanol 14/02106
productivity 14/01861
reformulated 14/02010
Gd123 superconductors 14/01980
Generators, exhaust heat recovery 14/02359
Geographical information systems 14/01969
Geological storage 14/01956
Geothermal energy 14/02175
potential mapping 14/02173
use in integrated systems 14/02164
use in micro-CHP plants 14/02223
Geothermal fields 14/02172
characterizing 14/02170
Geothermal fluids, tracers 14/02174
Geothermal systems 14/02169
exploration 14/02167
Germany
aquifer cooling systems 14/02076
building energy efficiency 14/02305
electricity generation systems 14/01965
energy efficiency programmes 14/02315
renewable energy strategies 14/02219
renewable energy systems 14/02217
Glass
coatings 14/02123
laminated 14/02132
Glass-fibre composite 14/01933
Glazing 14/02140
antireflective films 14/02123
solar collectors 14/02084
Glycerol 14/02348
steam reforming 14/01938
Grape marc 14/02041
Graphene 14/02198, 02247
oxides 14/02088
Graphite
oxides 14/02285
waste management 14/01964
Grass pellets 14/02011
Greece
urban energy planning 14/02203
use of photovoltaic systems 14/02184
Green
certificates 14/01987
roofs 14/02078, 02204
Greenhouse gases 14/02033, 02035, 02213, 02297, 02304, 02330, 02345
Greenhouses 14/02097
Grids 14/01974
integration generation, integrating renewable energy 14/02197
photovoltaic systems 14/02184
vulnerability 14/01975
Ground
heat exchangers 14/02092, 02171
source heat pumps 14/02166, 02177
Groundwater 14/02175
Hamaca crude oil 14/01859
Heat
and mass transfer 14/02231
conduction 14/02012, 02062
exchangers 14/01868, 02043, 02068, 02070, 02086, 02091, 02163, 02165, 02185, 02352, 02359
fluxes 14/02083
gain 14/02078
generation 14/02255
load 14/01951, 01976

loss 14/02061
pipes 14/02074
pumps 14/02066, 02073, 02085, 02166, 02177
recovery 14/02308, 02349, 02359
recovery steam generators 14/02001
storage 14/02071, 02136, 02195, 02232
Heat transfer 14/01866, 01932, 02006, 02031, 02065, 02084, 02097, 02143, 02188, 02225
Heat transfer fluids 14/02183
Heat transfer prediction 14/02038
Heating, ventilation and air conditioning units, on buses 14/02331
Heavy oil 14/01859, 01863, 01891
Heliostats 14/01941
Helium refrigerators 14/01951
Hemp, use for bioenergy 14/02152
Hextuple generation systems 14/02164
Households
carbon dioxide emissions 14/02280
electricity demand 14/01985
energy use 14/01995, 02321
gas consumption 14/01909
retrofits 14/02309
Humidity 14/02349
Hybrid energy systems 14/02066
design decisions 14/02213
Hybrid vehicles 14/02110, 02312
Hydraulic fracturing 14/01876
Hydrocarbon
emissions 14/02111
source rock 14/01860
Hydrochar and lignite copyrolysis 14/02293
Hydrodynamics 14/02006, 02216, 02236
Hydroelectric power generation 14/02221
Hydroelectricity 14/02058
Hydrogen
conversion 14/01920
evolution reaction 14/01936
from bitumen gasification 14/01871
from hydrogen 14/01938
from methanol steam reforming 14/01890
from waste water 14/01940
fuel cells 14/01935
generators 14/02253
permselective membrane 14/01861
peroxide 14/01842
removal, from gas streams 14/01902
sulfide 14/01906, 02015, 02350
Hydrogen production 14/01937, 02050
from surplus power 14/01979
pressurized gasification 14/01939
use of solar energy 14/01941
Hydrogenase enzymes 14/01929
Hydrogeochemistry 14/02170
Hydrogeology 14/02177
Hydrolysis 14/01935
Hydropower 14/01996, 02220
Hydrothermal
carbonization 14/02004
fluid flow 14/02169
scheduling 14/02214
Hydroxyapatite 14/02230
Iceland, geothermal systems 14/02169, 02174
Ignition 14/02288
delay times 14/02102
timing 14/02105, 02106
Impellers, gas inducing 14/02237
Incineration 14/02355
power plants 14/02016
Incinerator, fly ash 14/01942
India
coalbed methane 14/01878
fast breeder reactors 14/01957
household carbon dioxide emissions 14/02280
landfill energy generation potential 14/02345
petroleum products 14/02304
photovoltaic performance assessment 14/02189
Indonesia
cogeneration using sugarcane 14/01983
energy policy 14/01996
Indoor climate 14/02135
Induction generator 14/02208
Industrial
ecology 14/02298
sites, land-use planning 14/02322
symbiosis 14/02040
tanks 14/02042
Industry
carbon capture and storage 14/02303
electricity cogeneration 14/02048
emissions 14/02056, 02057
energy systems 14/02053
energy use 14/02047, 02059, 02336
energy-intensive 14/02058
evaporative air-conditioning systems 14/02052
oil price effects 14/01880
plant-wide control 14/02055
process monitoring 14/02226
production process efficiency 14/02127
sludge biowaste 14/02357
use of by-products 14/02041
use of trigeneration systems 14/02045
waste heat recovery 14/02046
Information
representation 14/02339
strategies 14/02338
Infrared imaging 14/01887
Infrastructure funding 14/01913
Insulation 14/02032, 02080, 02176
materials 14/02334
systems 14/02332
Insulators 14/02069
Integrated gasification combined cycle power plants 14/01912
Internal combustion engines
fuel formulation 14/02100
in cylinder flow 14/02104
Internal resistance 14/02251
Inverters 14/02194, 02209
Investor preference 14/02218
Ionic liquids 14/01888, 02357
Iran
natural gas-fired power plants 14/01915
natural gas transmission network 14/01937
Iran, petrochemical industry 14/01883
Ireland
energy demand 14/02307
impact of electric vehicles 14/01994
Iron
carbon encapsulated nanoparticles 14/01852
industry, carbon capture 14/02056, 02057
oxides 14/01947
oxyhydroxides 14/01946
Irradiance forecast 14/01988
Italy
construction sector optimization 14/02301
energy efficient buildings 14/02334
life cycle assessment of low-energy buildings 14/02302
micro-CHP plants 14/02223
photovoltaic plant soiling 14/02178
retrofit of buildings 14/02328
smart gas meters 14/01910
underground gas storage 14/01897
use of trigeneration systems in food industry 14/02045
use of wine production residues 14/02041
ITER magnets 14/01958
Japan
energy security 14/02324
Fukushima accident 14/01959, 01962, 02358
Hachimantai geothermal area 14/02242
non-ferrous metals industry 14/02336
nuclear fuel cycle and energy security 14/01960
power generation 14/01966
Jet fuel, hydrotreated renewable 14/02297
Joule–Thomson cooling system 14/02063
Kerogen 14/01891
Kilns 14/02032
heat transfer 14/02354
Kinetic model 14/02019
Knock 14/02100
Korea
carbon dioxide, capture and storage 14/02281
industrial use of LNG 14/01934
Kriging 14/01847
Laminated glass 14/02132
Laminates 14/02202
heat transfer 14/02062
mechanics 14/02132
Land use 14/02144, 02160
and biofuel potential 14/02157
planning 14/02322
Landfills 14/02345
leachates 14/02346
Landscape and energy 14/02265
Latent heat 14/02096
storage 14/01855, 02072, 02232
thermal energy storage 14/02067
Leachate 14/01942
Light
intensity 14/01941
redirection 14/02135
Light-water reactors 14/02358
Lighting 14/02333
Lignite
blends 14/02293
cogasification 14/01926
mining 14/02273
pretreatment 14/01842
Lignocellulosic materials 14/02145, 02155
Limestone 14/02282
Lipids
energy metabolism 14/02249
energy source 14/02249
Liquefied natural gas 14/01930
cargo containment systems 14/01933
effect of Fukushima nuclear accident 14/02324
flow boiling heat transfer 14/01932
industrial use 14/01934
infrastructures, financing 14/01913
regasification 14/01931
Liquefied petroleum gas 14/02228, 02351
Liquid
and gas flow 14/01864
flow 14/02237
fuel combustion 14/02101
holdup 14/02236
nitrogen 14/02070

Lithium
-air batteries 14/02258
batteries 14/02113, 02120, 02138, 02180, 02255
iron phosphate batteries 14/02255
Load
demand 14/02207
monitoring 14/01995
Magma 14/02169, 02172
activities 14/02242
Magnesium catalysts 14/01938
Magnetic molecularly imprinted polymers 14/01948
Magnets 14/01958, 02209
Manganese oxide 14/02257
Manufacturing industry, use of LNG 14/01934
Manure 14/02148
Marine
microalgae 14/02151
molten carbonate fuel cells 14/01930
renewable energy 14/02218
Mass transfer 14/02243
Maximum power point tracking 14/02199
Melting 14/02232
Membranes 14/01902, 02033, 02124, 02146, 02290
bioreactors 14/02290
electrode assemblies 14/02257
emulsification 14/02245
reactors 14/01861, 02050
Mercury 14/02023
Metal
hydroxides 14/02118
oxide catalysts 14/01938
oxide oxygen carriers 14/01927
Meters, reading 14/01914, 01976
Methane 14/01923, 01940
carbon nanotubes 14/01852
fuel blends 14/02102
reforming 14/01928
Methanol
electro-oxidation 14/02224
fuel cells 14/02256
steam reforming 14/01890
thermochemical conversion from biomass 14/02161
Microalgae 14/02148
biodiesel processing pathway 14/02154
biofuel feedstock 14/02151
production 14/02348
Micro-arc cladding 14/02224
Microbial
fermentation 14/01929
fuel cells 14/02250, 02251
Microchannels 14/02065
Microcogeneration systems 14/02229
Microencapsulated stearic acid 14/02087
Microfixed bed reactors 14/02236
Microgrids 14/01974, 01979, 02215
Microreactors 14/02243
Microstructured reactors 14/02043
Microstructures 14/02128
Microwave pyrolysis 14/02351
Mineral matter 14/01836
Mineralizers 14/02049
Minerals in coal 14/01835
Miniaturization 14/02063
Mining 14/01839, 01844
Miscanthus 14/02142
use for bioenergy 14/02152
Mixing 14/01932, 02042, 02235
Molten
carbonate fuel cells 14/01930
salt storage tanks 14/02240
salt thermocline direct storage system 14/02044
Molybdenum vanadate nanowires 14/01981
Monoethanolamine 14/02009
absorption 14/01978
Municipal solid waste
energy generation potential 14/02345
incineration 14/02016, 02355
recovery 14/02343
Nanocubes 14/02120
Nanofluids 14/02129, 02342
heat transfer 14/02094
Nanoparticles 14/01946
Nanorods 14/01890
Nanostructures 14/01972
Nanowires 14/01981, 02257
Natural convection 14/02029
Natural gas 14/02102
automated meter readings 14/01914
combustion 14/02026
dehydration 14/01905, 02228
demand 14/01918
desulfurization 14/01903
drilling 14/01906
extraction 14/01900
fired burners 14/02013
fired combined cycle 14/01978
fired power plants 14/01915
networks 14/01937
pipeline networks 14/01920
processing plants 14/01907
storage 14/01908
stranded 14/01898
supplies 14/02325
supply portfolios 14/01911
use for power generation 14/01921
water vapour measurements 14/01895
Net zero-energy buildings 14/02340
Netherlands
electricity distribution 14/01989
household gas consumption 14/01909
New Zealand, Kawerau geothermal field 14/02172
Nickel oxides 14/01923
nanocuboids 14/02120
nanowires 14/01972
Nickel
and sulfur/ceria electrodes 14/01936
catalysts 14/01928, 01938
Nitrates 14/02093
Nitrogen
for water removal 14/02260
liquid 14/02070
removal 14/02290
Nitrogen oxides 14/02021, 02284, 02286
combustion 14/01834
emissions 14/02013, 02026, 02030, 02101, 02288, 02293
Nonylphenol 14/01948
Nordic power market 14/01990
Nuclear energy
effect of Fukushima accident 14/01966, 01967
phase-out in Germany 14/01965
research 14/01960
waste management 14/02358
Nuclear fuel
pellet characterization 14/01953
recrystallization 14/01954
Nuclear power
demand 14/01918
effect of Fukushima 14/02324
risk perception 14/01962
Nuclear power plants
emergency evacuation 14/01961
for electricity 14/01968
life extension 14/01963
local attitudes 14/01959
Nuclear reactors
fuel pins 14/01957
piping systems 14/01955
waste reduction 14/01949
Nuclear waste 14/01956
disposal 14/01950
management 14/01964
Occupant behaviour 14/01985, 02332
Octane number 14/02100
Office buildings, energy use assessment 14/02310
Offshore
carbon capture and storage 14/02281
platforms and use of waste heat 14/02352
Oil
beta 14/01880
exporting countries 14/02311
formation damage 14/01870
from waste tyres 14/02351
in water emulsions 14/02245
markets 14/01879
price, effect on economic growth 14/01877
prices, risk exposure 14/01880
product transportation 14/01875
recovery 14/01885, 02141, 02233
refining industry 14/01881
reservoirs 14/01862
re-use in co-digestion 14/02346
rheology 14/01859
sands 14/01873
shale 14/01860, 01866
storage 14/01874
supplies 14/02304
transport dependency 14/02319
trapped in sandstones 14/01863
unconventional resources 14/01884
upgrading 14/01871
wells 14/01869, 02281
Olivine 14/01945
Online prediction 14/02226
OPEC, oil production 14/01879
Operating procedures 14/02235
Opinion polls 14/02306
Optical floating zone furnaces 14/02120
Organic pollutants 14/01942
Organic Rankine cycle 14/01971, 02046, 02183, 02223, 02352
Orinoco oil belt 14/01884
Oscillators 14/02137
Oxide superconductors 14/01980
Oxycoal combustion 14/02010
Oxyfuel 14/01849, 02021
combustion 14/02007, 02016
Oxygen 14/02102
enrichment, Claus process 14/02015
Oxygen carriers 14/01944, 02018, 02024
bimetallic 14/01927
particles 14/02031
Oxygenated compounds 14/02017
Packed bed reactors 14/01922
Palladium membranes 14/02050
Palm oil 14/01889
Palmitic acid 14/02088
Paper pulp mills, sludge biowaste 14/02357
Paraffin 14/02096
and water emulsion 14/01855
Particle distribution 14/02042

Passenger vehicles, energy consumption 14/02319
Passive houses 14/02302
Pellets 14/02343
furnaces 14/02011
Pennycress, use for biofuels 14/02297
Permanent magnet synchronous generators 14/02209
Permeability 14/01843
Petrochemical industry, energy use 14/01883
Petroleum 14/01866
products life cycle assessment 14/02304
Phase change materials 14/01855, 02067, 02072, 02097, 02136, 02190, 02232, 02238, 02342
Phenol hydroxylation 14/02124
Philippines, energy policy 14/01996
Photoactivity 14/02285
Photobioreactors 14/02148
Photocatalysis 14/02025
Photofermentation 14/01940
Photosynthesis 14/02249
Photovoltaics 14/01974, 02194, 02200
agriculture 14/02191
collectors 14/02066
computing techniques 14/02199
effect of roofing 14/02204
electricity generation 14/01969
energy 14/02179
modules 14/02202
plants, module soiling 14/02178
soiling losses 14/02196
systems 14/02134, 02184, 02189, 02193, 02201
urban environments 14/02203
vehicle charging 14/02215
Pig production, energy generation from waste 14/02156
Pipes 14/01899, 01913, 01920
corrosion 14/01955
dope 14/01870
gas-inducing 14/02237
Piston dynamics 14/02105
Plant control 14/02055
Plastic wastes
gasification 14/01945
pyrolysis 14/02019
Platinum and titanium electrodes 14/02224
Plug-in hybrid electric vehicles 14/02108, 02116
charging 14/02215
Plutonium
interatomic interaction 14/02248
recycling 14/02358
Pollution 14/02178, 02264
emissions 14/02103
reservoirs 14/01896
Polycyclic aromatic hydrocarbons 14/02284, 02293, 02296
Polyethylenimine sorbent 14/02283
Polygeneration 14/01848, 02149
Polymer
electrolyte membrane fuel cells 14/02260, 02253
processing 14/01902
solar cells 14/02181
Polymeric binders 14/02039
Polymers 14/02244
Polymorphism 14/02075
Pool fires 14/02037
Poplar 14/02158
Porosity 14/02192
Portland cement, corrosion 14/02131
Potash 14/02107
Power 14/01923
coefficient 14/02206
density 14/02251
dispatch 14/02214
distribution 14/01974, 02207
electronics 14/02241
grid, wind energy integration 14/02205
infrastructure 14/01975
market 14/01990
Power generation 14/02208
carbon capture and storage 14/02303
energy storage 14/02275
expansion planning 14/01986
hextuple systems 14/02164
hybrid systems 14/02212
integrating renewable energy 14/02197
Power plants 14/01979
carbon capture ready 14/01845
carbon dioxide capture 14/01901
carbon dioxide emission costs 14/01885
concentrating solar 14/02187
emissions 14/02021
flash 14/02164
natural gas 14/01915
solar thermal storage 14/02195
syngas storage 14/01912
waste heat recovery 14/01978
waste incineration 14/02016
Power
quality 14/01970
stations, decentralization 14/02267
tracking systems 14/02186
Power systems 14/01991, 02000
ancillary services 14/01993
Powertrains 14/02115
Predictability 14/01877
Pressure
drop 14/02086
propagation 14/01865
Process
integration 14/02054, 02298
intensification 14/02147
monitoring 14/02226
safety 14/01917
simulation 14/02073
Processing
pathways 14/02154
technology 14/02040
Procurement planning 14/01881
Production
planning 14/01919
scheduling 14/02060
Propulsion systems 14/02266
Protein mixtures 14/02244
Proton exchange membrane fuel cells 14/02229, 02254, 02259
power plants 14/01979
Public
and private partnerships 14/02355
opinion 14/01959, 01982, 02211, 02270, 02276, 02306
Pulp and paper mills, process integration 14/02054
Pyrolysis 14/01854, 01866, 01924, 01925, 02343, 02351
coal and algae blends 14/02027
of tyres and plastics 14/02019
Radiation 14/02029, 02069
Radiative
heat 14/02012, 02038
transfer 14/02036
Radiators 14/02259
Radioactive waste 14/01949
Rankine cycle 14/01978, 02359
bottoming 14/02347
Rape oil 14/02157
Rebound effect 14/02327
Reclaimed heat 14/02085
Refineries 14/02155
sludge 14/01925
Reforming systems 14/02229
Refractories 14/02130
bricks 14/02095
Refrigerants 14/01943, 02063, 02077, 02089, 02098, 02342
Reheating furnace 14/02012
Renewable electricity
costs 14/01992
standards 14/02144, 02221
Renewable energy 14/01967, 01974
grid 14/01998
policy impacts 14/02210
sources demand 14/01918
strategies 14/02219
support and effect on unemployment 14/02272
systems and effect of climate 14/02217
Reservoirs 14/01896, 01919
Residential energy use 14/01985, 01995, 02309, 01997, 02321
Retorts, steam 14/02003
Retrofitting 14/02309, 02332
Risk assessments 14/02322
Rivers, hydroplants 14/02220
Rock
and fluid interactions 14/02174
bed thermal energy storage 14/02187
hydrocarbon source 14/01860
maturation 14/01891
oil reservoirs 14/01863
reservoirs 14/02282
Roofs
and photovoltaic system efficiency 14/02204
cool 14/02080
heat transfer 14/02078
solar collector integration 14/02121
Rotary kilns 14/02032, 02354
Rubber tyres, pyrolysis 14/02019
Russia, energy relations with the European Union 14/02325
Salts 14/02093
Sandstones, viscous oil 14/01863
Saturation effect 14/02047
Sawdust 14/01854
gasification 14/01939
Scrubbing 14/02014
Seasonal load profiles 14/02217
Seawater filtration 14/02125
Sediment 14/01858
Self-cleaning 14/02025
Sensors 14/02226
placement 14/01917
Sewage sludge 14/02346
energy recovery 14/01926
Shading 14/02135, 02193
Shale gas 14/01876, 01894
industry and local community 14/01916
production 14/01919
reservoirs 14/01872
upgrading 14/01866
Share prices 14/01967
Shell and tube heat exchangers 14/02086
Shipping transport, energy conservation 14/02335
Short rotation forestry feedstock 14/02158
Signature recognition 14/01914

Silica 14/02126, 02283
antireflective coatings 14/02123
fume 14/02128, 02136
gel 14/02077
nanoparticle 14/02129
Silicon 14/02192
carbide foam 14/01928
dioxide 14/02087
production process 14/02127
solar-grade 14/02073
use in photovoltaics 14/02134, 02189
Sinter cooling process 14/02356
Slot-die coating 14/02119
Sludge 14/02290
biowaste 14/02357
char 14/02004
Slug flow 14/01864
Slurry gelation 14/02095
Smart
energy grids 14/01976
gas meters 14/01910
grids 14/02222
Smoke 14/02284
Social
acceptance 14/02276
welfare 14/02275
Sodium 14/02014
hydroxide 14/02287
hypochlorite 14/01842
Soil
cooling systems 14/02092
gas 14/02263
pollution 14/02273
productivity 14/02268
remediation 14/02296
temperature 14/02163
Soiling, of photovoltaic modules 14/02178
Soils 14/02083
Solar
air heaters 14/02071
cells 14/02181, 02192, 02202
cooling plants 14/02081
forecasting 14/02197
glass 14/02123
heat pumps 14/02066
panels 14/02190
photovoltaics 14/02196, 02200
radiation 14/02031
rotary kilns 14/02032
thermal 14/02187
Solar collectors 14/02084, 02182, 02188
all-ceramic 14/02121
vapour cycles 14/02183
Solar energy
carports 14/02215
cooling and heating systems 14/02201
effect of climate 14/02217
effect of tree growth 14/02193
roof surfaces 14/02203
sorption storage 14/02082
storage 14/02097, 02163
thermal storage 14/02195, 02240
use for hydrogen production 14/01941
use in district heating 14/02053
use in micro-CHP plants 14/02223
Solar power
plants 14/02093
systems, tracking 14/02186
thermal energy storage 14/02044
Solid
and gas sorption 14/02089
and liquid suspension 14/02042
fuels, chemical-looping combustion 14/02024
materials, thermal properties 14/02069
oxide fuel cells 14/02252
state conductors 14/02138
waste fuel, use for gasification 14/02343
Solidification 14/02342
Solvents 14/02033, 02090, 02279
for waste oil recovery 14/02141
Sonication 14/02143
Soot 14/02017, 02028, 02030, 02109
photocatalytic soot removal 14/02025
Sorbents 14/01841, 01902, 02278
Sorbtion systems 14/02079
Sorption 14/02082
Sour gas condensate 14/01903
South Africa, rock bed thermal energy storage 14/02187
Soybean oil 14/02107
Spain
ground source heat pumps 14/02166
solar collectors 14/02185
solar cooling plants 14/02081
solar energy and electricity markets 14/01988
transmission lines 14/01982
use of photovoltaic energy 14/02179
Spark
plasma sintering 14/02230
timing 14/02105
Spot markets 14/01908
Stainless-steel piping 14/01955
Steam
condensation 14/02002
consumption 14/02003
flow 14/02006
generators 14/02001, 02005
in oxy-fuel combustion 14/02007
methane reformers 14/01930, 02050
Steam turbines 14/02183
thermoelectric topping 14/02008
Steel 14/02038
industry, carbon capture 14/02056, 02057
Stirred tanks 14/02042, 02245
Storage
systems 14/02081
tanks 14/01874, 01881, 02099, 02201
Straw, use for biofuels 14/02159
Stress corrosion 14/01955
Subcooling 14/02342
Substations 14/01976
Sugarcane 14/02145
energy generation from waste 14/02156
use in cogeneration 14/01983
Sulfur
compound formation 14/02015
oxides 14/02014, 02021
recovery 14/02020
removal 14/01841, 01903
Sulfur dioxide 14/02291
adsorption 14/02285
in volcanic plumes 14/02277
removal 14/01946
Supercapacitors 14/01972, 01981
Superconductors 14/01980, 02357
cables 14/02070
tapes 14/01977
Supercritical fluids 14/02174
Supersaturation of water 14/01896
Superstructures 14/02147
optimization 14/02154
Supply chains 14/01875, 02060, 02298
Suspensions 14/02042
Sweden
building energy efficiency 14/02305
renewable electricity policy 14/01987
Switchgrass 14/01840
Switzerland, biogas plant local acceptance 14/02270
Synchronous generators 14/02208
Syngas 14/01871, 01922, 01925, 01927
chemical looping combustion 14/01944
from microbial fermentation 14/01929
pressurized gasification 14/01939
storage 14/01912
Taiwan, cement industry 14/02059
Tanks, fluid-filled 14/01867
Tar 14/01926
removal 14/01945
sand 14/01856
Taxes
carbon dioxide 14/02304
credits 14/02112
Telecom operators, energy saving potential 14/02337
Temperature 14/02238
coefficients 14/02204
Thailand, building energy code 14/02122
Thermal
bridges 14/02061
collectors 14/01941, 02185
conductivity 14/02032, 02080, 02095, 02238
control units 14/02259
cracking furnaces 14/02026
furnace 14/02020
gradients 14/02282
insulation 14/02135
management 14/02096, 02241
processing 14/02003
properties, measurement 14/02069
storage 14/02093, 02136, 02195
transfer values 14/02078
Thermal energy 14/02089
storage 14/02045, 02067, 02075, 02088, 02097, 02165, 02187, 02240, 02342
Thermochemical
energy 14/02082, 02345
reactors 14/02032
Thermocline
storage system 14/02044
tanks 14/02195
Thermoelectric
cooling and heating systems 14/02201
energy storage systems 14/02099
topping cycle 14/02008
Thermography 14/02314
Thermolysis 14/02253
Thermostats 14/02259
Thorium 14/01949
Tidal bores, hydrodynamics 14/02216
Tight gas 14/01876
Titanium dioxide 14/02025, 02080
Total site heat integration 14/02308
Tourism and leisure industry, oil price effects 14/01880
Trace elements 14/02023, 01835
Transesterification 14/01889
Transient energy function 14/02208
Transistors 14/02241
Transmission
grids 14/02217
heat losses 14/02061
lines 14/01982
planning 14/02000
towers 14/01984
Transport 14/01875
AC loss 14/01977
costs 14/01879
energy conservation 14/02335
energy consumption 14/02319
Travel surveys 14/02108
Triassic evaporites 14/01897
Trichlorosilane 14/02073
Trigeneration 14/02045, 02229
Tropical climate 14/02122

Tungsten 14/02198
Tunisia, building cooling 14/02168
Turbines 14/02001, 02206
blades 14/02051
Turboprop engines 14/02266
Turbulent flow 14/02104
Turkey
building-integrated voltaic systems 14/02134
geothermal fields 14/02170
hybrid power generation systems 14/02212
use of solar collectors 14/02182
UK
biomass energy potential 14/02142
community energy 14/02261
energy efficiency programmes 14/02315
farms and use of straw for biofuels 14/02159
housing stock retrofits 14/02309
landscape and energy 14/02265
London aquifers 14/02177
low-energy buildings 14/02341
marine renewable energy 14/02218
natural gas pipeline networks 14/01920
Ultrafiltration 14/02125
Ultrasonics 14/02143
Underground storage 14/01897, 02097
Uranium 14/01953, 01954
electrodeposits 14/01952
Urban
energy planning 14/02203
energy systems 14/02298
photovoltaic potential 14/01969
planning 14/02193
Urbanization, effect on carbon dioxide emissions 14/02274
Urea 14/01890
USA
attitudes to wind energy 14/02211
bioelectricity and land use 14/02144
biofuels and land use 14/02297
coal power plant combustion products 14/02023
coal resources and reserves 14/01844
electricity generation from photovoltaics 14/01969
energy policy goals 14/02306
household energy use 14/01995
personal energy consumption 14/02319
plug-in hybrid electric vehicles 14/02215
renewable fuel policies 14/01840
residential energy use 14/01985, 02321
tourism and leisure industry and oil price 14/01880
use of plug-in hybrid electric vehicles 14/02108
wind power capacity 14/02210
Utility
production planning 14/02308
systems planning 14/02308
Valve timing 14/02106
Vanadium redox flow batteries 14/02247
Vapour
compression cycle 14/01951
cycle 14/02183
Vehicles, gasoline demand 14/01882
Venezuela
extra-heavy oil 14/01884
Hamaca crude oil 14/01859
Ventilated roofs 14/02080
Ventilation 14/02140, 02349
Venting 14/02003
Vertical axis wind turbine 14/02206
Vibration isolating structures 14/01933
Viscosity 14/02094
effect on flow 14/01864
Visible light 14/02285
Volcanic
emissions 14/02277
zones 14/02172
Voltage 14/02251
dip 14/01970
Waste
cooking oil, conversion to biodiesel 14/02143
fuel 14/02049
heat 14/02089, 02127
heat boilers 14/02020
heat recovery 14/01978, 02046, 02347, 02359
heat utilization 14/02356
lubricating oil 14/02141
pyrolysis 14/02019
-to-energy conversion systems, viability 14/02162
-to-energy incineration 14/02355
tyre products 14/02351
Wastewater
denitrifying sulfide removal 14/02353
fermentative hydrogen production 14/01940
use for biofuels 14/02348
use for biogas 14/02346
Water
and ethanol separation 14/01888
and steam Rankine cycle 14/02046
condensation 14/02332
cooling 14/02097
dew point 14/01895
droplet dynamics 14/02254
heating 14/02121
in coalbed methane wells 14/01878
oxidation 14/01942
removal 14/02260
splitting 14/01923, 02285
treatment 14/01904
vapour absorption 14/02244
Wave propagation 14/02239
Weather
-dependent renewable energy 14/02197
forecasting 14/01988
Welding 14/01957
Wells 14/01865, 01878, 01904, 01906, 02233
damage 14/01870
shut-in 14/01919
well-head gas 14/01898
Wheat farms, production efficiency 14/02330
Willow, use for bioenergy 14/02152
Wind
farms, siting 14/02276
flow, around solar collectors 14/02188
installed power capacity 14/02210
power forecasting 14/02205
Wind energy 14/01996
effect of climate 14/02217
effect of fluctuations 14/02206
global development potential 14/02318
public opinion 14/02211
Wind turbines 14/02209
distribution integration 14/02207
generators 14/02208
Windows
slats 14/02122
thermal insulation 14/02135
Wine production, residues 14/02041
Winter peak kW h reduction 14/01997
Wood
combustion emissions 14/02294
pellets 14/02011, 02149
residues, use for bioenergy 14/02269
torrefaction 14/02149
Working fluids 14/02347
Xylene 14/02295
Zeolites 14/02082, 02146
Zero energy buildings 14/02334
Zinc oxides 14/02285
Zircon 14/02242